

## References

---

- Adam, M. Mullen, K. "Oligomeric Tetrathiafulvalenes: Extended Donors for Increasing the Dimensionality of Electrical Conduction," *Adv. Mater.*, **6** (1994) 439-459.
- Adkins, J. C. Noble, S. "Efavirenz," *Drugs*, **56** (1998) 1055-1064.
- Ahmadi, T. S. Wang, Z. L. Green, T. C. Henglein, A. El- Sayed, M. A. "Shape-Controlled Synthesis of Colloidal Platinum Nanoparticles," *Science*, **272** (1996) 1924-1925.
- Albertini, R. J. Castle, K. L. Borcherding, W. R. "T-cell Cloning to Detect the Mutant 6-Thioguanine-Resistant Lymphocytes Present in Human Peripheral Blood," *Proc. Natl. Acad. Sci. USA*, **79 (21)**, (1982) 6617–6621.
- Alcaro, S. Alteri, C. Artese, A. Ceccherini-Silberstein, F. *et al.* "Molecular and Structural Aspects of Clinically Relevant Mutations Related to the Approved Non-Nucleoside Inhibitors of HIV-1 Reverse Transcriptase," *Drug Resist. Update*, **14** (2011) 141 - 149.
- Aragay, G. Pino, F. Merkoci, A. "Nanomaterials for Sensing and Destroying Pesticides" *Chem. Rev.*, **112** (2012) 5317-5338.
- Ardakani, M. M. Beitollahi, H. Amini, M. K. Mirkhalaf, F. Alibeik, M. A. "New Strategy for Simultaneous and Selective Voltammetric Determination of Norepinephrine, Acetaminophen and Folic Acid using ZrO<sub>2</sub> Nanoparticles-Modified Carbon Paste Electrode," *Sens. Actuators, B*, **151** (2010) 243–249.

## References

---

- Arribus, L. A. Delfino, M. R. Lomillo, M. A. A. Renedo, O. D. Martinez, M. J. A. “Electrochemical Oxidation of the Antiretroviral Drug Nelfinavir on Modified Screen Printed Electrodes,” *Electroanalysis*, **28** (2016) 1 – 7.
- Asturias-Arribas, L. Alonso-Lomillo, M. A. Domínguez-Renedo, O. Arcos-Martínez M. J. “Sensitive and Selective Cocaine Electrochemical Detection using Disposable Sensors,” *Anal. Chem. Acta*, **834** (2014) 30-36.
- Atta, N. F. Galal, A. Azab, S. M. “Electrochemical Morphine Sensing using Gold Nanoparticles Modified Carbon Paste Electrode,” *Int. J. Electrochem. Sci.*, **6** (2011) 5066 – 5081.
- Ayrton, J. “Assay of Ceftazidime in Biological Fluids using High-Pressure Liquid Chromatography,” *J. Antimicrob. Chemother.*, **8** (1981) 227-231.
- Baby, T. T. Ramaprabhu, S. “Enhanced Convective Heat Transfer using Graphene Dispersed Nanofluids,” *J. Mater. Chem.*, **21** (2011) 9702-9709.
- Baldwin, R. P. Thomsen, K. N. “Chemically Modified Electrodes in Liquid Chromatography Detection: A Review,” *Talanta*, **38** (1991) 1-16.
- Bandodkar, A. J. Wang J. “Non-Invasive Wearable Electrochemical Sensors: A Review,” *Trends Biotechnol.*, **32(7)** (2014) 363-372.
- Banica, F. G. “Chemical Sensors and Biosensors: Fundamental and Applications,” *john wiley and sons. Ltd., Publications*, 2012.
- Bard, A. J. Faulkner (Eds.) L. R. “Electrochemical Methods: Fundamentals and Applications,” *Wiley, New York*, 2000.

## References

---

- Barone, G. C. Halsall, H. B. Heineman, W. R. "Electrochemistry of Azidothymidine" *Anal. Chim. Acta*, **248** (2), (1991) 399 – 407.
- Barza, M. J. "The Nephrotoxicity of Cephalosporins: An Overview," *J. Infect. Dis.*, **137** (1978) 560-573.
- Bastus, N. G. Merkoci, F. Piella, J. Puntus, V. "Synthesis of Highly Monodisperse Citrate-Stabilized Silver Nanoparticles of up to 200 nm: Kinetic Control and Catalytic Properties," *Chem. Mater.*, **26** (2014) 2836-2846.
- Bayram, S. Zahar, O. K. Blum, A. S. "Short Ligands Offer Long-Term Water Stability and Plasmon Tunability for Silver Nanoparticles," *RSC Adv.*, **5** (2015) 6553-6559.
- Blachin, M. D. Kok, W. Th. Fabre, H. "New Detection Modes for the Determination of Cephalosporins and their Decomposition Products," *Chromatographia*, **4** (1987) 625-627.
- Bozio, R. Girlando, A. Pecile, D. "Infrared and Raman Spectra of TTF and TTF-d4," *Chem. Phys. Lett.*, **52** (1977) 503-508.
- Bozio, R. Zanon, I. Girlando, A. Pecile, C. "Vibrational Spectroscopy of Molecular Constituents of One-dimensional Organic Conductors. Tetrathiofulvalene (TTF), TTF<sup>+</sup>, and (TTF<sup>+</sup>)<sup>2</sup> Dimer," *J. Chem. Phys.*, **71** (1979) 2282-2293.
- Bryce, M. R. "Current Trends in Tetrathiafulvalene Chemistry: Towards Increased Dimensionality," *J. Mater. Chem.*, **5** (1995) 1481–1496.
- Bukkitgar, S. D. Shetti, N. P. Kulkarni, R. M. Nandibewoor, S. T. "Electro-

## References

---

- Sensing Base for Mefenamic Acid on a 5% Barium-Doped Zinc Oxide Nanoparticle Modified Electrode and its Analytical Application," *RSC Adv.*, **5** (2015) 104891-104899.
- Byrd, C. B. Nelson, R. Elliott, R. C. "Isoniazid Toxicity: A Prospective Study in Secondary Chemoprophylaxis," *JAMA*, **220** (1972) 1471-1473.
- Canvet, D. Salle, M. Zhang, G. Zhang, D. Zhu, D. "Tetrathiafulvalene (TTF) Derivatives: Key Building-Blocks for Switchable Processes," *Chem. Comm.*, (2009) 2245-2269.
- Carbone, M. Gorton L. Antiochia, R. "An Overview of the Latest Graphene-Based Sensors for Glucose Detection: the Effects of Graphene Defects," *Electroanalysis*, **27** (2015) 16–31.
- Carr, P. W. Browers (Eds.), L. D. "Immobilized Enzyme in Analytical and Clinical Chemistry," Wiley, New York, 1980.
- Cass, A. E. Davis, G. Francis, G. D. Hill, H. A. Aston, W. J. Higgins, I. J. Plotkin, E. V. Scott, L. D. Turner, A. P. "Ferrocene-Mediated Enzyme Electrode for Amperometric Determination of Glucose," *Anal. Chem.*, **56 (4)**, (1984) 667-671.
- Catterall, R. W. "Chemical sensors" *Oxford University Press, Oxford, UK*, (1997) 4–30.
- Chaki, N. K. Sudrik, S. G. Sonawane, H. R. Vijayamohanan, K. "Single Phase Preparation of Monodispersed Silver Nanoclusters using a Unique Electron Transfer and Cluster Stabilising Agent, Triethylamine," *Chem. Commun.*, (2002) 76–77.

## References

---

- Chang, R. L. J. Yang, J. “Para-Mercaptobenzoic Acid-Modified Silver Nanoparticles as Sensing Media for the Detection of Ammonia in Air based on Infrared Surface Enhancement Effect,” *Analyst*, **136** (2011) 2988–2995.
- Charterjee, A. Das, D. Mandal, B. K. Chowdhury, T. R. Samanta, G. Chakraborti, A. “Arsenic in Ground Water in Six Districts of West Bengal, India: the Biggest Arsenic Calamity in the World. Part I: Arsenic Species in Drinking Water and Urine of the Affected People,” *Analyst*, **120** (1995) 643-650.
- Chen, Z. Zhang, X. Cao, H. Huang, Y. “Chitosan-Capped Silver Nanoparticles as a Highly Selective Colorimetric Probe for Visual Detection of Aromatic *Ortho*-Trihydroxy Phenols,” *Analyst*, **138** (2013) 2343-2349.
- Chiu, D. T. Duesberg, P. H. “The Toxicity of Azidothymidine (AZT) on Human and Animal Cells in Culture at Concentrations Used for Antiviral therapy” *Genetica*, **95** (1995) 103–109.
- Choudhary, M. Siwal, S. Islam, R. U. Witcomb, M. J. Mallick, K. “Carbon Nitride Supported Palladium Nanoparticles: An Active System for the Reduction of Aromatic Nitro-Compounds,” *Chem. Phys. Lett.*, **608** (2014) 145-151.
- Christensen, C. A. Goldenberg, L. M. Bryce, M. R. Becher, J. “Synthesis and Electrochemistry of a Tetrathiafulvalene (TTF)<sub>21</sub>-Glycol Dendrimer: Intradendrimer Aggregation of TTF Cation Radicals,” *Chem. Commun.* (1998) 509-510.
- Christie, J. H. Lingane, P. J. “Theory of Staircase Voltammetry,” *J. Electroanal. Chem.*, **1965**, **10** (1965) 176-182.

## References

---

- Cincotto, F. H. Golinelli, D. L. C. Machado, S. A. S. Moreas F. C. “Electrochemical Sensor based on Reduced Graphene Oxide Modified with Palladium Nanoparticles for Determination of Desipramine in Urine Samples,” *Sens. Actuators, B*, **239** (2017) 488–493.
- Ciucu, A. A. “Chemically Modified Electrodes in Biosensing,” *J. Biosens. Bioelectron*, **5 (3)**, (2014) 154-164.
- Clark, L. C. Jr. Lyons, C. “Electrode Systems for Continuous Monitoring in Cardiovascular Surgery,” *Ann. N.Y. Acad. Sci.*, **102** (1962) 29 – 45.
- Clercq, E. De “Anti-HIV Drugs: 25 Compounds Approved within 25 Years after the Discovery of HIV,” *Int. J. Antimicrob Agents*, **33** (2009) 307-320.
- Clercq, E. De “Antiviral Therapy for Human Immunodeficiency Virus Infections,” *Biochem. Pharmacol.*, **47** (1994) 155-169.
- Clercq, E. De “Antivirals: Current State of The Art,” *Future Virol.*, **3** (2008) 393-405.
- Degani, Y. Heller, A. “Direct Electrical Communication Between Chemically Modified Enzymes and Metal Electrodes. I. Electron transfer from glucose oxidase to metal electrodes via electron relays, bound covalently to the enzyme,” *J. Phys. Chem.*, **91 (6)** (1987) 1285-1289.
- El-Maali, N. A. “Voltammetric Analysis of Ceftazidime after Preconcentration at Various Mercury and Carbon Electrodes: Application to Sub-ppb Level Determination in Urine Samples,” *Talanta*, **51** (2000) 957-968.

## References

---

- El-Maali, N. A. Ali, M. M. Maala, M. K. Ghandour, M. A. "Cathodic Stripping Voltammetric Determination of the Cephalosporin Antibiotic Ceftriaxone at the Mercury Electrode in Aqueous and Biological Media" *J. Electroanal. Chem.*, **321** (1991) 485-492.
- Fan, B. Stewart, J. T. "Determination of Lamivudine/Stavudine/Efavirenz in Human Serum using Liquid Chromatography/Electrospray Tandem Mass Spectrometry with Ionization Polarity Switch," *Biomed. Chromatogr.*, **16** (2002) 383–389.
- Fan, Y. Liu, J. H. Lu, H. T. Zhang, Q. "Electrochemical Behavior and Voltammetric Determination of Paracetamol on Nafion/TiO<sub>2</sub>-Graphene Modified Glassy Carbon Electrode," *Colloids Surf. B*, **85** (2011) 289-292.
- Faraji, A. H. Wipf, P. "Nanoparticles in Cellular Drug Delivery," *Bioorganic Med. Chem.*, **17** (2009) 2950–2962.
- Fathi, A. S. "A Novel and Low Cost Electrochemical Sensor for Ceftazidime and Cefazoline as Antibiotic Drugs based on Nickel/SDS-Poly (*o*-Aminophenol) Modified Electrode," *Russ. J. Electrochem.*, **50** (2014) 468-475.
- Fendler, J. H. Meldrum, F. C. "The Colloid-Chemical Approach to Nanostructured Materials," *Adv. Mater.*, **7** (1995) 607-632.
- Ferreira, V. S. Zanoni, M. V. B. Fogg, A. G. "Cathodic Stripping Voltammetric Determination of Ceftazidime in Urine at a Hanging Mercury Drop Electrode," *Microchem. J.* **57** (1997) 115-122.

## References

---

- Ferreira, V. S. Zanoni, M .V. B. Furlan, M. Fogg, A. G. "Differential Pulse Polarographic Determination of Ceftazidime in Urine Samples With and Without Prior Extraction," *Anal. Chim. Acta*, **351** (1997) 105-114.
- Ferreira, V. S. Zanoni, M. V. B. Fogg, A. G. "Cathodic Stripping Voltammetric Determination of Ceftazidime with Reactive Accumulation at a Poly-L-Lysine Modified Hanging Mercury Drop Electrode," *Anal. Chim. Acta*, **384** (1999) 159-166.
- Firrer, D. R. Schroeder, R. R. "Staircase Voltammetry with Varied Current Sampling Times: Theory for Diffusion Controlled, Rate Controlled, and Mixed Rate and Diffusion Controlled Electrode Reactions," *J. Electroanal. Chem.*, **45** (1973) 343-359.
- Firrer, D. R. Chidester, D. H. Schroeder, R. R. "Application of Staircase Voltammetry with a Varied Current Sampling Time," *J. Electroanal. Chem. Interf. Chem.*, **45** (1973) 361-376.
- Florey, K. "CFZ, Analytical Profiles of Drug Substances," *Academic Press*, **19** (1990) 95-121.
- Font, E. Rosario, O. Santana, J. Garcia, H. Sommadossi, J. P. Rodriguez, J. F. "Determination of Zidovudine Triphosphate Intracellular Concentrations in Peripheral Blood Mononuclear Cells from Human Immunodeficiency Virus-Infected Individuals by Tandem Mass Spectrometry," *Antimicrob. Agents Chemother.* **43** (1999) 2964–2968.

## References

---

- Fox, J. G. Wang, T. C. "Inflammation, Atrophy, and Gastric Cancer," *J. clin. Invest.*, **117** (2007) 60-69.
- Garrod, S. Bolland, M. E. Nicholls, A. W. Connor, S. C. Connelly, J. Nicholson, J. K. Holmes, E. "Integrated Metabonomic Analysis of the Multiorgan Effects of Hydrazine Toxicity in the Rat," *Chem. Res. Toxicol.*, **18** (2005) 115- 122.
- Garzone, P. Lyon, J. A. Yu, V. L. "Third-Generation and Investigational Cephalosporins: I. Structure-activity Relationships and Pharmacokinetic Review," *Drug. Intell. Clin. Pharm.*, **17** (1983) 507- 515.
- Geng, Q. Du, J. "Reduction of 4-Nitrophenol Catalyzed by Silver Nanoparticles Supported on Polymer Micelles and Vesicles," *RSC Adv.*, **4** (2014) 16425-16428.
- Ghavale, N. Dey, S. Jain, V. K. Tewari, R. "2 - Methoxycycloocta-1, 5-dienyl Platinum Complexes as Precursors for Platinum Nanoparticles," *Bull. Mater. Sci.*, **32** (2009) 15–18.
- Gholivand M. Ahmadi E. Haseli M. "A Novel Voltammetric Sensor for Nevirapine, based on Modified Graphite Electrode by MWCNs/Poly (Methylene blue)/Gold Nanoparticle. *Anal Biochem.*, **527** (2017) 4-12.
- Ghosh, C. Gaur, S. Singh, A. Shinde, C. P. Chakraborty, B. S. "Estimation of Nevirapine from Human Plasma by ESI-LC-MS/MS: a Pharmacokinetic Application," *J. Bioequiv. Bioavailab.*, **3** (2011) 20-25.
- Gobbo, P. Biesinger, M. C. Workentin, M. S. "Facile Synthesis of Gold Nanoparticle (AuNP)-Carbon Nanotube (CNT) Hybrids Through an Interfacial Michael Addition Reaction," *Chem. Commun.*, **49** (2013) 2831-2833.

## References

---

- Gong, G. Wang, Y. Yang, H. "A Sensitive Impedimetric DNA Biosensor for the Determination of the HIV Gene based on Graphene-Nafion Composite Film," *Biosens. and Bioelectron.*, **89** (2017) 565–569.
- Granich, G. G. Eveland, M. R. Krogstad, D. J. "Fluorescence Polarization Immunoassay for Zidovudine," *Antimicrob. Agents Chemother.*, **33** (1989) 1275–1279.
- Gringauz, A. "Introduction to Medicinal Chemistry: How Drugs Act and Why" *New York Wiley- VCH*, (1997) 77-92.
- Gupta, S. Prakash, R. "Photochemically Assisted Formation of Silver Nanoparticles by Dithizone, and its Application in Amperometric Sensing of Cefotaxime," *J. Mater. Chem. C*, **2** (2014) 6859–6866.
- Gupta, S. Singh, A. K. Jain, R. K. Chandra, R. Prakash, R. "Phenothiazine-Capped Gold Nanoparticles: Photochemically Assisted Synthesis and Application in Electrosensing of Phosphate Ions," *Chem. Electro. Chem.*, **1** (2014) 793-798.
- Gupta, S. Prakash, R. "Photochemically Mediated Synthesis of a Gold Colloid by Dithizone and its Application in the Amperometric Sensing of Thiocyanate." *RSC Adv.*, **5** (2015) 81660-81667.
- Heller, A. "Electrical Wiring of Redox Enzymes," *Acc. Chem. Res.*, **23 (5)**, (1990) 128-134.
- Heeswijk, R. P. G. Hoetelmans, R. M. W. Meenhorst, P. L. Mulder J. W. Beijnen, J. H. "Rapid Determination of Nevirapine in Human Plasma by Ion-Pair Reversed-

## References

---

- Phase High-Performance Liquid Chromatography with Ultraviolet Detection” *J. Chromatogr. B*, **713** (1998) 395–399.
- Hirsch, M. S. D’ Aquilla, R. T. “Therapy for Human Immunodeficiency Virus,” *N. Engl. J. Med.*, **328** (1993) 1686-1695.
- Hoetelmans R. M. W. Burger, D. M. Meenhorst, P. L. Beijnen. J. H. “Pharmacokinetic Individualisation of Zidovudine Therapy,” *Clin. Pharmacokinet.* **4** (1996) 314–327.
- Hollanders, R. M. F. Van, Ewijk-Beneken Kolmer, E. W. J. Burger D. M. Wuis, E. W. Koopmans, P. P. Hekster, Y. A. “Determination of Nevirapine, an HIV-1 Non-Nucleoside Reverse Transcriptase Inhibitor, in Human Plasma by Reversed-Phase High-Performance Liquid Chromatography,” *J. Chromatogr., B*, **744** (2000) 65–71.
- Hua, M. Zhang, S. Pan, B. Wang, Zhang, W. Lu, L. Zhang, Q. “Heavy Metal Removal from Water/Wastewater by Nanosized Metal Oxides: A Review,” *J. Haz. Mat.*, **211–212** (2012) 317–331.
- Huang, H., Yuan Q. Yang, X. “Preparation and Characterization of Metal-Chitosan Nanocomposites,” *Colloids Surf. B*, **39** (2004) 31–37.
- Hwang, P. T. Drexler, R. P. G. Meyer, M. C. “High-Performance Liquid Chromatographic Determination of Ceftazidime in Serum, Urine, CSF, and Peritoneal Dialysis Fluid,” *J. Liq. Chromatogr.*, **7** (1984) 979-987.
- Jesus, C. S. Diculescu, V. C. “Redox Mechanism, Spectrophotometrical Characterisation and Voltammetric Determination in Serum Samples of Kinases Inhibitor and Anticancer Drug Dasatinib,” *J. Electroanal. Chem.*, **752** (2015) 47–53.

## References

---

- Jhu, N. Chang, Z. He, P. Fang, Y. "Electrochemical DNA Biosensors based on Platinum NPs Combined Carbon Nanotubes," *Anal. Chim. Acta*, **545** (2005) 21-26.
- Jiang, L. Zeng, H. Li, H. Jiang, L. Shi, Y. M. Sun, Y. H. "Comment on "Strongly Luminescent Monolayered MoS<sub>2</sub> Prepared by Effective Ultrasound Exfoliation," *Nanoscale*, **7** (2015) 4580–4583.
- Jogerson, T. Hansen, T. K. Becher, J. "Tetrathiafulvalenes as Building-Blocks in Supramolecular Chemistry," *Chem. Soc. Rev.*, **23** (1994) 41-51.
- Kalimuthu, K. Babu, R. S. Venkataraman, D. Bilal, Md. Gurunathan, S. "Biosynthesis of Silver Nanocrystals by *Bacillus Licheniformis*," *Colloid Surf. B*, **65** (2008) 150-153.
- Kalanur, S. S. Seetharamappa, J. "Electrochemical Oxidation of Bioactive Carbamazepine and its Interaction with DNA," *Anal. Lett.* **43** (2010) 618-630.
- Kamimura, T. Matsumoto, Y. Okada, N. "Ceftizoxime (FK 749), a New Parenteral Cephalosporin: *in vitro* and *in vivo* Antibacterial Activities," *Antimicrob. Agents Chemother*, **16** (1979) 540-548.
- Kashish, Gupta, S. Dubey S. K. Prakash, R. "Genosensor based on a Nanostructured, Platinum Modified Glassy Carbon Electrode for Listeria Detection," *Anal. Methods*, **7** (2005) 2616-2622.
- Katz, E. Willner, I. Wang, J. "Electroanalytical and Bioelectroanalytical Systems based on Metal and Semiconductor Nanoparticles," *Electroanalysis*, **16** (2004) 19-44.

## References

---

- Kauffman, G. B. "Isoniazid - Destroyer of the White Plague," *J. Chem. Educ.*, **55** (7), (1978) 448-449.
- Kaur, G. Behrsing, H. Parchment, R. E. Millin, M. D. Teicher, B. A. "Analysis of the Combination of 6-MP and Dasatinib in Cell Culture," *Int. J. Oncol.*, **43**(1), (2013) 13–22.
- Kim, J. Wu, X. Herman, M. R. Dordick, J. S. "Enzymatically Generated Polyphenols as Array Based Metal Ion Sensors," *Anal. Chim. Acta.*, **367** (1998) 251–258.
- Kobayashi, S. Toshitsugu, K. Shin-ichiro, S. "Synthesis of Artificial Chitin: Irreversible Catalytic Behavior of a Glycosyl Hydrolase through a Transition State Analogue Substrate," *J. Am. Chem. Soc.*, **118** (1996) 13113-13114.
- Konnova, S. A. Danilushkina, A. A. Fakhrullina, G. I. Akhatova, F. S. Badrutdinov, A. R. Fakhrullin, R. F. "Silver Nanoparticle-Coated "Cyborg" Microorganisms: Rapid Assembly of Polymer-Stabilised Nanoparticles on Microbial Cells," *RSC Adv.*, **5** (2015) 13530-13537.
- Kumar, A. Kumar, A. Chandra, R. "Fabrication of Porous Silicon Filled Pd/ SiC Nanocauliflower Thin Films for High Performance H<sub>2</sub> Gas Sensor" *Sens. Actuators, B*, **264** (2018) 10-19.
- Kumar, V. Srivastava, S. Umrao, S. Kumar, R. Gopal, N. Sumana, G. Saxena P. S. Srivastava, A. "Nanostructured Palladium-Reduced Graphene Oxide Platform for High Sensitive, Label Free Detection of a Cancer Biomarker," *RSC Adv.*, **4** (2014) 2267-2273.

## References

---

- Kuśmierk, K. Chwatko, G. Głowacki, R. Bald, E. "Determination of Endogenous Thiols and Thiol Drugs in Urine by HPLC with Ultraviolet Detection," *J. Chromatogr. B*, **877** (28), (2009) 3300–3308.
- Leandro, K. C. Moreira, J. C. Farias, P. A. M. "Determination of Zidovudine in Pharmaceuticals by Differential Pulse Voltammetry," *Anal. Lett.*, **43** (2010) 1951–1957.
- Leeder, J. S. Tesoro, S. M. MacLeod, A. M. Stuart, M. "High Pressure Liquid Chromatographic Analysis of Ceftazidime in Serum and Urine," *Antimicrob. Agents Chemother.* **24(5)**, (1983), 720-724.
- Li, Z. Chen, Y. Xin, Y. Zhang, Z. "Sensitive Electrochemical Nonenzymatic Glucose Sensing based on Anodized CuO Nanowires on Three-Dimensional Porous Copper Foam," *Sci. Rep.* | **5**:16115 | DOI: 10.1038/srep16115.
- Lim, B. Jiang, M. Camargo, P. H. C. Cho, E. C. Tao, J. Lu, X. Zhu, Y. Xia, Y. "Pd-Pt Bimetallic Nanodendrites with High Activity for Oxygen Reduction," *Science*, **324** (2009) 1302-1305.
- Lijinsky, W. Epstein, S. S. "Nitrosamines as Environmental Carcinogens," *Nature*, **225** (1970) 21-23.
- Li, Y. Fan, X. Qi, J. Ji, J. Wang, S. Zhang, G. Zhang, F. "Palladium Nanoparticle-Graphene Hybrids as Active Catalysts for the Suzuki Reaction," *Nano Research.*, **3** (2010) 429–437.
- Liu, S. Q. Leech, D. Ju, H. X. "Application of Colloidal Gold in Protein Immobilization, Electron Transfer, and Biosensing," *Anal. Lett.* **36** (2003) 1-19.

## References

---

- Lopes, W. A. Jaeger, H. M. "Hierarchical Self-Assembly of Metal Nanostructures on Diblock Copolymer Scaffolds," *Nature*, **414** (2001) 735-738.
- Lopez, R. M. Pou, L. Gomez, M. R. Ruiz, I. Monterde J. "Simple and Rapid Determination of Nevirapine in Human Serum by Reversed- Phase High-Performance Liquid Chromatography," *J. Chromatogr. B*, **751** (2001) 371–6.
- Luo, L. X. Xu, J. J. Zhao, W. Chen, H-Y. "A Novel Glucose ENFET Based on the Special Reactivity of MnO<sub>2</sub> Nanoparticles," *Biosens. Bioelectron.*, **19** (2004) 1295–1300.
- Luo, X. L. Xu, J. J. Zhao, W. Chen, X. Y. "Ascorbic Acid Sensor Based on Ionsensitive Field-Effect Transistor Modified with MnO<sub>2</sub> Nanoparticles," *Anal. Chem. Acta*, **512** (2004) 57-61.
- Mahato, K. Maurya, P. K. Chandra, P. "Fundamentals and Commercial Aspects of Nanobiosensors in Point-of-care Clinical Diagnostics" *3 Biotech*, **8** (2018) 149.
- Maleh. H. K. Shojaei, A. F. Tabataeian. K. Karimi, F. Shakeri, S. Moradi, R. "Simultaneous Determination of 6-Mercaptopurine, 6-Thioguanine and Dasatinib as Three Important Anticancer Drugs using Nanostructure Voltammetric Sensor Employing Pt/MWCNTs and 1-Butyl-3-Methylimidazolium hexafluoro phosphate," *Biosens. Bioelectron.*, **86** (2016) 879–884.
- Mahmoud, B. G. Khairy, M. Rashwan, F. A. Banks. C. E. "Simultaneous Voltammetric Determination of Acetaminophen and Isoniazid (Hepatotoxicity-Related Drugs) Utilizing Bismuth Oxide Nanorod Modified Screen-Printed Electrochemical Sensing Platforms," *Anal. Chem.* **89** (2017) 2170 – 2178.

## References

---

- Mashhadizadeh, M. H. Afshar, E. "Electrochemical Studies and Selective Detection of Thioridazine using a Carbon Paste Electrode Modified with ZnS Nanoparticles and Simultaneous Determination of Thioridazine and Olanzapine," *Electroanalysis* **24 (11)**, (2012) 2193 – 2202.
- Mattson, D. M. Ahmad, I. M. Dayal, D. Parsons, A. D. Burns, N. A. Li, L. Orcutt, K. P. Spitz, D. R. Dornfeld, K. J. Simons, A. L. "Cisplatin Combined with Zidovudine Enhances Cytotoxicity and Oxidative Stress in Human Head and Neck Cancer Cells via a Thiol-Dependent Mechanism," *Free Radic. Biol. Med.*, **46** (2009) 232–237.
- Melendrez, M. F. Cardenas, G. Arbiol, J. "Synthesis and Characterization of Gallium Colloidal Nanoparticles," *J. Colloid. Interf. Sci.*, **346** (2010) 279-287.
- Miean, K. H. Mohamed, S. "Flavonoid (Myricetin, Quercetin, Kaempferol, Luteolin, and Apigenin) Content of Edible Tropical Plants," *J. Agric. Food Chem.* **49** (2001) 3106 - 3112.
- Mirvish, S. S. "Role of N-nitroso Compounds (NOC) and N-nitrosation in Etiology of Gastric, Oesophageal, Nasopharyngeal and Bladder Cancer and Contribution to Cancer of Known Exposures to NOC," *Cancer lett.*, **93** (1995) 17-48.
- Mistri, H. N. Shrivastav, P. Jangid, A. G. Sanyal, M. "Development and Validation of a Rapid Liquid Chromatography Tandem Mass Spectrometry Method to Quantify Nevirapine in Human Plasma and its Application to Bioequivalence Study in Healthy Human Subjects," *Anal. Lett.*, **40** (2007) 1147–1165.

## References

---

- Mohan, S. Prakash, R. "Novel Conducting Polymer Functionalized with Metal-Cyclam Complex and its Sensor Application: Development of Azidothymidine Drug Sensor," *Talanta*, **81** (2010) 449-454.
- Montgomery, J. A. "The Biochemical Basis for the Drug Action of Purines," *Progress Med. Chem.* **7** (1970) 69-123.
- Mphuti, N. G. Adekunle, A. S. Fayemi, O. E. Olasunkanmi, L. O. Ebenso, E. E. "Phthalocyanine Doped Metal Oxide Nanoparticles on Multiwalled Carbon Nanotubes Platform for the detection of Dopamine," *Sci. Rep.* | **7**:43181 | DOI: 10.1038/srep43181.
- Myers, C. M. Blumer, J. L. "Determination of Ceftazidime in Biological Fluids by using High-Pressure Liquid Chromatography," *Antimicrob. Agents Chemother.*, **24** (1983) 343-346.
- Nahata, M. C. Morosco, R. S. "Measurement of Ceftazidime Arginine in Aqueous Solutions by HPLC," *J. Liq. Chromatogr.*, **15** (1992) 1507-1511.
- Nakamura, K. Yoshida, Y. Mikami, I. Okuhara, T. "Selective Hydrogenation of Nitrate in Water over Cu–Pd/Mordenite," *Appl. Catal. B: Environ.*, **65** (2006) 31-36.
- Nakai, H. Yoshihara, M. Fujihara, H. "New Electroactive Tetrathiafulvalene-Derivatized Gold Nanoparticles and their Remarkably Stable Nanoparticle Films on Electrodes," *Langmuir* **15** (1999) 8574-8576.
- Namiki, Y. Tanabe, T. Kobayashi, T. Tanabe, J. Okimura, Y. Koda, S. Morimoto, Y. "Degradation Kinetics and Mechanisms of a New Cephalosporin, Cefixime, in Aqueous Solution," *J. Pharm. Sci.*, **76** (1987) 208-214.

## References

---

- Negm, N. A. Tawfik, S. M. Abd-Elaal, A. A. “ Enhancement of the Surface Activity for Some Monomeric and Polymeric Thiol Surfactants using Silver Nanoparticles,” *J. Indus. Eng. Chem.* **25** (2015) 1051-1057.
- Nigra, M. M. Ha, J. M. Katz, A. “Identification of Site Requirements for Reduction of 4-Nitrophenol using Gold Nanoparticle Catalysts,” *Catal. Sci. Techol.*, **3** (2013) 2976-2983.
- Nirala, N. R. Abraham, S. Kumar, V. Pandey, S. A. Yadav, U. Srivastava, M. Srivastava, S. K. Singh, V. Kayastha. A. M. Srivastava, A. Saxena, P. S. “Partially Reduced Graphene Oxide–Gold Nanorods Composite based Bioelectrode of Improved Sensing Performance,” *Talanta*, **144** (2015) 745–754.
- Notari, S. Mancone, C. Alonzi, T. Tripodi, M. Narciso, P. Ascenzi, P. “Simultaneous Determination of Lamivudine, Lopinavir, Ritonavir, and Zidovudine Concentration in Plasma of HIV-infected Patients by HPLC-MS/MS” *J. Chromatogr., B*, **64** (2012) 443–449.
- Novo, C. Funston, A. M. Gooding, A. K. Mulvaney, P. “Electrochemical Charging of Single Gold Nanorods,” *J. Am. Chem. Soc.* **131** (2009) 14664–14666.
- Ogorevc, B. Gomiscek, S. “Electrochemical Analysis of Cephalosporin Antibiotics,” *J. Pharm. Biom. Analysis*, **9** (1991) 225-236.
- Ogorevc, B. Krasna, A. Hudnik, V. Gomiscek, S. “Adsorptive Stripping Voltammetry of Selected Cephalosporin Antibiotics and their Direct Determination in Urine,” *Mikrochim. Acta1*, **103** (1991) 131-144.

## References

---

- Okamoto, Y. Kiriyama, K. Namiki, Y. Matsushita, J. Fujioka, M. Yasuda, T. "Degradation Kinetics and Isomerization of Cefdinir, a New Oral Cephalosporin, in Aqueous Solution. 2. Hydrolytic Degradation Pathway and Mechanism for  $\beta$ -Lactam Ring Opened Lactones," *J. Pharm. Sci.*, **85** (1996) 976-983.
- Pandey, S. Goswami, G. K. Nanda, K. K. "Green synthesis of biopolymer-silver nanoparticle nanocomposite: an optical sensor for ammonia detection," *Int. J. Biol. Macromol.*, **51** (2012) 583-589.
- Park, S. Boo, H. Chung, T. D. "Electrochemical Non-Enzymatic Glucose Sensors," *Anal. Chim. Acta*, **556** (2006) 46–57.
- Parreira, R. L. T. Abrahao, O. Galembeck, S. E. "Conformational Preferences of Non-nucleoside HIV-1 Reverse Transcriptase Inhibitors," *Tetrahedron*, **57** (2001) 3243-3253.
- Pav, J. W. Rowland, L. S. Korpalski, D. J. "HPLC-UV Method for The Quantitation of Nevirapine in Biological Matrices Following Solid Phase Extraction," *J. Pharm. Biomed. Anal.*, **20** (1999) 91–98.
- Peckova, K. Navratil, T. Yosypchuk, B. Moreira, J. C. Leandro, K. C. Barek, J. "Voltammetric Determination of Azidothymidine Using Silver Solid Amalgam Electrodes," *Electroanalysis*, **21(15)**, (2009) 1750-1757.
- Peng, H. I. Miller, B. L. "Recent Advancements in Optical DNA Biosensors: Exploiting the Plasmonic Effects of Metal Nanoparticles," *Analyst*, **136** (2011) 436–447.

## References

---

- Pethkar, S. Aslam, M. Mulla, I. S. Ganeshan, P. Vijayamohan, K. “Preparation and Characterisation of Silver Quantum Dot Superlattice using Self-assembled Monolayers of Pentanedithiol” *J. Mater. Chem.*, **11** (2001) 1710–1714.
- Pileni, M. P. “The Role of Soft Colloidal Templates in Controlling the Size and Shape of Inorganic Nanocrystals,” *Nat. Mater.*, **2** (2013) 145–150.
- Pumera, M. Sofer, Z. Ambrosi, A. Takeshita, H. T. Sakai, T. Lin, T. W. “Layered Transition Metal Dichalcogenides for Electrochemical Energy Generation and Storage,” *J. Mater. Chem. A.*, **2** (2014) 8981–8987.
- Quevedo, M. A. Teijeiro, S. A. Brinon, M. C. “Quantitative Plasma Determination of a Novel Antiretroviral Derivative of Zidovudine by Solid-Phase Extraction and High-Performance Liquid Chromatography,” *Anal. Bioanal. Chem.*, **385** (2006) 377–384.
- Radhakrishnan, S. Krishnamoorthy, K. Seker, C. Wilson, J. Kim, S. J. “A highly Sensitive Electrochemical Sensor for Nitrite Detection based on Fe<sub>2</sub>O<sub>3</sub> Nanoparticles Decorated Reduced Graphene Oxide Nanosheets,” *Appl. Catal., B*, **148** (2014) 22–28.
- Rafati, A. Afraz, A. “Amperometric Sensing of Anti-HIV Drug Zidovudine on Ag Nanofilm-Multiwalled Carbon Nanotubes Modified Glassy Carbon Electrode,” *Mater. Sci. Eng. C*, **39** (2014) 105–112.
- Rahway, N. J. “The Merck Index, 10th ed. Merck and Co. “Encyclopedia of Chemicals,” *Drugs and Biologicals Inc.*, U.S.A., **1983**. 1913.

## References

---

- Raj, C. R. Okajima, T. Oshaka, T. "Gold Nanoparticle Arrays for the Voltammetric Sensing of Dopamine," *J. Electroanal. Chem.*, **543** (2003) 127-133.
- Raj, C. R. Behera, S. "Electrochemically Triggered Michael Addition on the Self Assembly of 4-Thiouracil: Generation of Surface-Confining Redox Mediator and Electrocatalysis," *Langmuir*, **23** (2007) 1600–1607.
- Ramachandran, G. Hemantkumar, A. K. Kumarswami, V. Swaminathan, S. "A simple and Rapid Liquid Chromatography Method for Simultaneous Determination of Zidovudine and Nevirapine in plasma," *J. Chromatogr. B.*, **843** (2006) 339-344.
- Rao, K. S. V. K. Naidu, V. K. Subha, M. C. S. Sairam, M. Aminabhavi, T. M. "Novel Chitosan-Based pH-Sensitive Interpenetrating Network Microgels for the Controlled Release of Cefadroxil," *Carbohydr. Polym.*, **66** (2006) 333–344.
- Rao, R. N. Shinde, D. D. "Two-Dimensional LC–MS/MS Determination of Antiretroviral Drugs in Rat Serum and Urine," *J. Pharm. Biomed. Anal.*, **50** (2009) 994–999.
- Rastogi, P. K. Ganesan, V. Krishnamoorthi, S. "Palladium Nanoparticles Decorated Gaurgum based Hybrid Material for Electrocatalytic Hydrazine Determination," *Electrochim. Acta*, **147** (2014) 442-450.
- Rathee, K. Dhull, V. Dhull, R. Singh, S. "Biosensors Based on Electrochemical Lactate Detection: A Comprehensive Review," *Biochem. Biophys. Rep.*, **5** (2016) 35–54.

## References

---

- Raviolo, M. A. Sanchez, J. M. Briñón, M. C. Perillo, M. A. “Determination of Liposome Permeability of Ionizable Carbamates of Zidovudine by Steady State Fluorescence Spectroscopy,” *Colloids Surf., B*, **61** (2008) 188–198.
- Razzaq, H. Qureshi, R. Schiffrin, D. “Enhanced Rate of Electron Transfer across Gold Nanoparticle-Anthraquinone Hybrids,” *Electrochim. Commun.*, **39** (2014) 9–11.
- Reeves, D. S. Bywater, M. J. Bullock, D. W. “Pharmacokinetic Study of a Sulfamethopyrazine/trimethoprim Combination (Kelfiprim) in Human Volunteers” *J. Antimicrob. Chemother.* **6** (1980) 647-656.
- Robertson, C. E. Ford, M. J. Someren, V. V. Dlugolecka, M. Prescott, L. F. “Mefenamic Acid Nephropathy,” *Lancet*, **2** (1980) 232-233.
- Salimi, A. Mamkhezri, H. Hallaj, R. Soltanian, S. “Electrochemical Detection of Trace Amount of Arsenic (III) at Glassy Carbon Electrode Modified with Cobalt Oxide Nanoparticles,” *Sens. Actuators, B*, **129** (2008) 246–254.
- Sambyal, P. Dhawan S. K. Gairola, P. Chauhan, S. S. Gairola, S. P. “Synergistic Effect of Polypyrrole/BST/RGO/Fe<sub>3</sub>O<sub>4</sub> Composite for Enhanced Microwave Absorption and EMI Shielding in X-Band” *Curr. Appl. Phys.* **18** (2018) 611-618.
- Sau, T. K. Rogach, A. L. Jäckel, F. Klar, T. A. Feldmann, J. “Properties and Applications of Colloidal Nonspherical Noble Metal Nanoparticles,” *Adv. Mater.*, **22** (2010) 1805–1825.
- Sekar, R. Azhaguvvel S. “MEKC Determination of Antiretroviral Reverse Transcriptase Inhibitors Lamivudine, Stavudine, and Nevirapine in Pharmaceutical

## References

---

Formulations," *Chromatographia* , **67** (2008) 389–398.

Shahrokhian, S. Ghalkhani, M. Adeli, M. Amini, M. K. "Electrodeposition of Copper Oxide Nanoparticles on Precasted Carbon Nanoparticles Film for Electrochemical Investigation of anti-HIV Drug Nevirapine," *Electroanalysis*, **27** (2015) 1989 – 1997.

Shahrokhian, S. Salimian, R. Rastgar, S. "Pd-Au Nanoparticles Decorated Carbon Nanotube as a Sensing Layer on the Surface of Glassy Carbon Electrode for Electrochemical Determination of Ceftazidime," *Mater. Sci. Eng. C*, **34** (2014) 318-325.

Shahrokhian, S. Rastgar, S. "Construction of an Electrochemical Sensor based on the Electrodeposition of Au–Pt Nanoparticles Mixtures on Multi-Walled Carbon Nanotubes Film for Voltammetric Determination of Cefotaxime," *Analyst*, **137** (2012) 2706-2715.

Sharma, N. Ojha, H. Bhardwaj, A. Pathak, D. Sharma, R. K. "Preparation and Catalytic Applications of Nanomaterials: A Review," *RSC Adv.*, **5** (2015) 53381-53403.

Shen, X.-C. Jiang, L.-F. Liang, H. Lu, X. Zhang, L.-J. Liu, X.-Y. "Determination of 6-Mercaptopurine based on the Fluorescence Enhancement of Au Nanoparticles," *Talanta*, **69(2)** (2006) 456–462.

## References

---

- Shi, Y. Zhang, B. "Recent Advances in Transition Metal Phosphide Nanomaterials: Synthesis and Applications in Hydrogen Evolution Reaction," *Chem. Soc. Rev.*, **45** (2016) 1529-1541.
- Shukla, M. Pramila, Dixit, T. Prakash, R. Palani, I. A. Singh, V. "Influence of Aspect Ratio and Surface Defect Density on Hydrothermally Grown ZnO Nanorods towards Amperometric Glucose Biosensing Applications," *Appl. Surf. Sci.*, **422** (2017) 798–808.
- Si, P. Huang, Y. Wang, T. Ma, J. "Nanomaterials for Electrochemical Non-enzymatic Glucose Biosensors," *RSC. Adv.*, **3** (2013) 3487-3502.
- Sookhakiana, M. Zalenezhada, E. Alias, Y. "Layer-by-layer Electrodeposited Nanowall-like Palladium-Reduced Graphene Oxide Film as a Highly-Sensitive Electrochemical Non-Enzymatic Sensor," *Sens. Actuators, B*, **241** (2017) 1–7.
- Sosnik, A. Chiappetta, D. A. Carcaboso, Á. M. "Drug Delivery Systems in HIV Pharmacotherapy: What Has Been Done and the Challenges Standing Ahead," *J. Control. Release*, **138** (2009) 2–15.
- Srivastava, M. Srivastava, S. K. Nirala, N. R. Prakash, R. "A Chitosan-based Polyaniline–Au Nanocomposite Biosensor for Determination of Cholesterol," *Anal. Methods*, **6** (2014) 817-824.
- Tang, Y. Wu, D. Mai, Y. Pan, H. Cao, J. Yang, C. Zhang F. Feng, X. "Two-Dimensional Hybrid with Molybdenum Disulfide Nanocrystals Strongly Coupled on Nitrogen-Enriched Graphene via Mild Temperature Pyrolysis for High Performance Lithium Storage," *Nanoscale*, **6** (2014) 14679–14685.

## References

---

Tarinc, D. Dogan-Topal, B. Golcu, A. Ozkan, S. A. “Electrochemical Investigation and Determination of Ceftazidime in Pharmaceutical Dosage forms and Human Urine,” *J. Electroanal. Chem.*, **69** (2014) 899-908.

Teradal, N. L. Seetharamappa,, J. “Bulk modification of Carbon Paste Electrode with Bi<sub>2</sub>O<sub>3</sub> Nanoparticles and its Application as an Electrochemical Sensor for Selective Sensing of Anti-HIV drug Nevirapine,” *Electroanalysis*, **27** (2015) 2007 – 2016.

Thornton, J. E. “The Microbiological Assay of Ceftazidime,” *J. Antimicrob. Chemother.* **8** (1981) 225-226.

Tiwari, M. Kumar, A. Shankar, U. Prakash, R. “The Nanocrystalline Coordination Polymer of AMT–Ag for an Effective Detection of Ciprofloxacin Hydrochloride in Pharmaceutical Formulation and Biological Fluid,” *Biosens. Bioelectron.* **85** (2016) 529–535.

Torkashvand, M. Gholivand, M. B. Malekzadeh, Gh. “Construction of a New Electrochemical Sensor based on Molecular Imprinting Recognition Sites on Multiwall Carbon Nanotube Surface for Analysis of Ceftazidime in Real Samples,” *Sens. Actuators, B*, **231** (2016) 759-767.

Torrance, J. B. Scott, B. A. Welber, B. Kaufman, F. B. Seiden, P.E. “Optical Properties of the Radical Cation Tetrathiafulvalenium (TTF<sup>+</sup>) in its Mixed-Valence and Monovalence Halide Salts,” *Phys. Rev. B: Condens. Matter.*, **19** (1979) 730-741.

## References

---

- Trnkova, L. Kizek, R. Vacek, J. "Square Wave and Elimination Voltammetric Analysis of Azidothymidine in the Presence of Oligonucleotides and Chromosomal DNA," *Bioelectrochem.*, **63** (2004) 31-36.
- Tyczkowska, K. L. Seay, S. S. Stoskopf, M. K. Aucoin, D. P. "Determination of Ceftazidime in Dolphin Serum by Liquid *Chromatography* with Ultraviolet-Visible Detection and Confirmation by Thermospray Liquid *Chromatography*-Mass Spectrometry," *J. Chromatogr. B Biomed. Appl.*, **114** (1992) 305-313.
- Vacek, J. Zahmakiran, M. Özkar, S. "Metal Nanoparticles in Liquid Phase Catalysis; from Recent Advances to Future Goals," *Nanoscale*, **3** (2011) 3462–3481.
- Vacek, J. Andrysik, Z. Tmkova L. Kizek, R. "Determination of Azidothymidine – an Antiproliferative and Virostatic Drug by Square-Wave Voltammetry," *Electroanalysis*, **16** (2004) 224-230.
- Wang, C. Yuan, R. Chai, R. Chen, S. Zhang, Y. Hu, F. Zhang, M. "Non-Covalent Iron (III)-Porphyrin Functionalized Multi-Walled Carbon Nanotubes for the Simultaneous Determination of Ascorbic Acid, Dopamine, Uric Acid and Nitrite," *Sens. Actuators, B*, **62** (2012) 109–115.
- Wang, J. "Nanoparticles Based Electrochemical DNA Detection," *Anal. Chem. Acta.*, **500** (2003) 247-257.
- Wang, Y. Wei, Z. Zhang, J. Wang, X. Li, X. "Electrochemical Determination of Apigenin as An Anti-Gastric Cancer Drug in *Lobelia chinensis* Using Modified Screen-Printed Electrode," *Int. J. Electrochem. Sci.* **12** (2017) 2003 – 2012.

## References

---

- Wang, Z. L. "Transmission Electron Microscopy of Shape-Controlled Nanocrystals and their Assemblies," *J. Phys. Chem. B*, **104** (2000) 1153–2117.
- Wang, X. Naka, K. Itoh, H. Park, S. Chujo, Y. "Synthesis of Silver Dendritic Nanostructures Protected by Tetrathiafulvalene," *Chem. Commun.*, (2002) 1300–1301.
- Wang, X. Itoh, H. Naka, K. Chujo, Y. "Tetrathiafulvalene-Assisted Formation of Silver Dendritic Nanostructures in Acetonitrile," *Langmuir*, **19** (2003) 6242-6246.
- Warnke, D. Barreto J. Temesgen, Z. "Therapeutic Review: Antiretroviral Drugs" *J. Clin. Pharmacol.* **47** (2007) 1570-1579.
- Watt, J. Cheong, S. Toney, M. F. Ingham, B. Cookson, J. Bishop, P. T. Tilley, R. D. "Ultrafast Growth of Highly Branched Palladium Nanostructures for Catalysis," *ACS Nano*, **4** (2010) 396–402.
- Wei, D. Sun, W. Qian, W. Ye, Y. Ma, X. "The Synthesis of Chitosan-Based Silver Nanoparticles and Their Antibacterial Activity," *Carbohydr. Res.*, **344** (2009) 2375-2382.
- Willner, I. Heleg-Shabtai, V. Blonder, R. Katz, E. Tao, G. Buckmann, A. F. Heller, A. "Electrical Wiring of Glucose Oxidase by Reconstitution of FAD-Modified Monolayers Assembled onto Au-Electrodes," *J. Am. Chem. Soc.* **118** (1996) 10321-10322.
- Wilson, O. M. Scott, R. W. J. Garcia-Martinez J. C. Crooks, R. M. "Synthesis, Characterization, and Structure-Selective Extraction of 1–3-nm Diameter Au Ag

## References

---

- Dendrimer-Encapsulated Bimetallic Nanoparticles," *J. Am. Chem. Soc.*, **127** (2005) 1015–1024.
- Xia, B. Y. Yan, Y. Wang, X. Lou, X. W. *et al.* "Recent Progress on Graphene-Based Hybrid Electrocatalysts," *Mater. Horiz.* **1** (2014) 379–399.
- Xu. J. Jingling, S. Wang, Y. Sheng, J. Wang, F. Sun, M. "Application of Iron Magnetic Nanoparticles in Protein Immobilization," *Molecules*, **19** (8), (2014) 11465-11486.
- Xu, J. J. Zhao, W. Liang, X. Chen, H. Y. "A Sensitive Biosensor for Lactate based on Layer-by-Layer Assembling MnO<sub>2</sub> Nanoparticles and Lactate Oxidase on Ion-Sensitive Field-Effect Transistors," *Chem. Commun.* (2005) 792–794.
- Yang, S. Yue, W. Huang, D. Chen, C. Lin H. Yang, X. "A Facile Green Strategy for Rapid Reduction of Graphene Oxide by Metallic Zinc," *RSC Adv.*, **2** (2012) 8827-8832.
- Yang, W. Ma, Y. Tang, J. Yang, X. "Green Synthesis of Monodisperse Pt Nanoparticles and their Catalytic Properties," *Colloids Surf., A*, **302** (2007) 628–633.
- Zacco, E. Pividori, M. I. Alegret, S. "Electrochemical Magneto Immune Sensing Strategy for the Detection of Pesticides Residues," *Anal. Chem.*, **78** (2006) 1780-1788.
- Zeng, S. Baillargeat, D. Ho, H. P. Yong, K. T. "Nanomaterials Enhanced Surface Plasmon Resonance for Biological and Chemical Sensing Applications," *Chem. Soc. Rev.*, **43** (2014) 3426-3452.

## References

---

- Zeng, X. Q. Latimer, M. L. Xiao, Z. L. Panuganti, S. Welp, U. Kwok, W. K. Xu, T. "Hydrogen Gas Sensing with Networks of Ultrasmall Palladium Nanowires Formed on Filtration Membranes," *Nano Lett.*, **11** (2011) 262–268.
- Zhang, H. X. Cao, A. M. Hu, J. S. Wan, L. J. Lee, S. T. "Electrochemical Sensor for Detecting Ultratrace Nitroaromatic Compounds Using Mesoporous SiO<sub>2</sub>-Modified Electrode," *Anal. Chem.* **78** (2006) 1967-1971.
- Zhang, H. Huang, J. Hou, H. You, T. "Electrochemical Detection of Hydrazine Based on Electrospun Palladium Nanoparticle/Carbon Nanofibers," *Electroanalysis* **21(16)**, (2009) 1869 – 1874.
- Zhang, F. Li, L. Luo, L. Ding, Y. Liu, X. "Electrochemical Oxidation and Determination of Antiretroviral drug Nevirapine based on Uracil-Modified Carbon Paste Electrode," *J Appl. Electrochem.*, **43** (2013) 263–269.
- Zhou, W. Zou, X. Najmaei, S. Liu, Z. Shi, Y. Kong, J. Lou, J. Ajayan, P. M. Yakobson, B. I. Idrobo, J. C. "Intrinsic Structural Defects in Monolayer Molybdenum Disulfide," *Nano Lett.*, **13** (2013) 2615–2622.
- Zhuang, X. Mai, Y. Wu, D. Zhang F. Feng, X. "Two-Dimensional Soft Nanomaterials: A Fascinating World of Materials," *Adv. Mater.*, **27** (2015) 403–427.
- Zipper, J. J. Perone, S. P. "Theoretical and Experimental Evaluation of Staircase Voltammetry," *Anal. Chem.*, **45** (1973) 452-458.